

AMENDMENT TO THE CLAIMS

Please amend the claims as follows. This listing will replace all prior versions, and listing, of claims in the application. Claims 1, 3, 8, 11-15 and 20 have been amended.

Listing of Claims

1. (Currently amended): A navigation apparatus having a function of searching for a route to a destination, comprising:
 - a first memory section for storing map data;
 - a second memory section capable of storing part of the map data stored within said first memory section;
 - a position detector for detecting positional information of a vehicle;
 - a memory controller for causing said part of the map data stored in said first memory section to be stored in said second memory section when the vehicle reaches a predetermined altitude based upon said positional information, the memory controller being operable to permit access of said part of the map data only from said second memory section and restrict access to said first memory section when the vehicle is above the predetermined altitude; and
 - a display controller for displaying a map generated from the map data read from said second memory section on a display device.
2. (Original): The navigation apparatus according to claim 1, wherein said position detector comprises an altitude measuring section for measuring an altitude.
3. (Currently amended): The navigation apparatus according to claim 1, wherein said position detector calculates the altitude of the vehicle based on the latitude and longitude of the vehicle position, from the map data stored in said first memory section.

4. (Original): The navigation apparatus according to claim 1, wherein said memory controller causes the map data covering the position of the vehicle and its surroundings to be stored in said second memory section based upon said positional information.

5. (Original): The navigation apparatus according to claim 1, wherein said first memory section includes a hard disk drive (HDD).

6. (Original): The navigation apparatus according to claim 1, wherein said predetermined altitude is about 3,000 m.

7. (Original): The navigation apparatus according to claim 1, wherein the map data stored in said first memory section and said second memory section includes route data from which a guidance route to the destination can be obtained by performing a route search.

8. (Currently amended): A navigation apparatus having a function of searching for a route to a destination, comprising:

a first memory section for storing map data;

a second memory section capable of storing part of the map data stored within said first memory section;

a pressure measuring section for measuring atmospheric pressure at the location of a vehicle;

a memory controller for causing said part of the map data stored in said first memory section to be stored within said second memory section when the atmospheric pressure measured by said pressure measuring section is equal to or less than a predetermined value, the memory controller being operable to permit access of said part of the map data only from

said second memory section and restrict access to said first memory section when the measured atmospheric pressure is less than the predetermined value; and

a display controller for displaying a map generated from the map data read from said second memory section on a display device.

9. (Original): The navigation apparatus according to claim 8, wherein said predetermined value is about 0.7 atm.

10. (Original): The navigation apparatus according to claim 8, wherein said first memory section includes a hard disk drive.

11. (Currently amended): A navigation apparatus having a function of searching for a route to a destination, comprising:

a first memory device for storing map data;

a second memory device for storing map data of areas located at or above a predetermined altitude;

an altitude measuring section for measuring an altitude at the location of a vehicle;

an access section for accessing only one of said first memory device or said second memory device and restricting access to the other based upon a result measured by said altitude measuring section ~~to read the map data from said first or second memory device;~~ and

a display controller for displaying a map generated from the map data read by said access section on a display device.

12. (Currently amended): The navigation apparatus according to claim 11, wherein said first memory device includes a hard disk drive, and wherein said access section accesses said second memory device when it is determined that the vehicle has reached ~~reaches~~ said predetermined altitude.

13. (Currently amended): A navigation apparatus having a function of reproducing music, comprising:

- a magnetic storage medium for storing music data and map data;
- a memory device capable of storing the music data and the map data stored in said magnetic storage medium;
- a position detector for detecting positional information of a vehicle;
- a memory controller for causing the music data and the map data stored within said magnetic storage medium to be stored within said memory device when the vehicle reaches a predetermined altitude based upon said positional information and subsequently only permits access to the music data and the map data from said memory device and not from said magnetic storage medium if the vehicle remains at or above the predetermined altitude;
- an audio output device for playing music generated from the music data read from said memory device by sound; and
- a display controller for displaying a map generated from the map data read from said memory device on a display device.

14. (Currently amended): A navigation apparatus having a function of guiding a vehicle along a route to a destination, comprising:

a magnetic storage device for storing map data and route data to the destination;

a memory device;

a memory controller that, when said route data includes a road located at or above a predetermined altitude, transfers the map data of areas located at or above the predetermined altitude, from said magnetic storage device to said memory device and subsequently restricts access to the magnetic storage device while the vehicle is traveling a road located at or above the predetermined altitude; and

a display controller for displaying on a display device a road map covering said areas, which are located at or above the predetermined altitude, based upon the map data stored within said memory device.

15. (Currently amended): A method for accessing map data in a navigation apparatus having a function of guiding a vehicle along a route to a destination, comprising:

measuring an altitude at a location where a vehicle is traveling;

saving map data stored in a first memory to a second memory when the vehicle reaches a predetermined altitude and reading the map data stored within the second memory instead of reading the map data from the first memory as a function of altitude; and

displaying a map generated from the read map data on a display device.

16. (Original): The access method according to claim 15, further comprising measuring, when the vehicle subsequently returns to or goes below the predetermined altitude, an interval during which it has been positioned above said predetermined altitude,

wherein, if said interval is shorter than a predetermined interval, then the access to the second memory is continued.

17. (Original): The access method to map data according to claim 15, wherein said first memory is a hard disk drive.

18. (Original): The access method to map data according to claim 15, wherein said second memory is a semiconductor memory.

19. (Original): The access method according to claim 15, wherein said altitude is about 3,000 m.

20. (Currently amended): A method for accessing data in a navigation apparatus having a function of reproducing music, comprising:

measuring an altitude at a vehicle location;

saving music data and map data stored within a first memory to a second memory when the vehicle reaches a predetermined altitude and subsequently reading the data stored within the second memory;

restricting access to the first memory while the vehicle remains at or above the predetermined altitude;

playing music generated from the music data read from the second memory; and

displaying a map generated from the map data read from the second memory on a display device.